Staff Variance Report For March 4, 2014 Commission Meeting

- "A" category = staff recommendation is for approval with no equal alternatives because of noncompliance is not adverse.
- "B" category = staff recommendation is for approval with equal alternatives as stated by the proponent.
- "C" category = reserved, meaning staff believes Commission needs to discuss entirety.
- "D" category = recommendation is for denial.
- "I" category = incomplete (with permission of the Chairman).
- "NVR" category = no variance required.

NOTE: All staff recommendations presume code statements on the variances by the applicant are correct, unless otherwise noted. This means that all code statements become conditions of the variances and, if not true, the variances would be subject to Commission sanction. All LBO and LFO responses that they have received a copy of the application for variance are in order, unless otherwise noted.

Tabled Variances:

13-11-12 C Hoosier House Furnishings, LLC – Goshen

The code required spray booths and storage room will not be provided with an approved automatic fire extinguishing system. The proponent advises that this is an existing manufacturing operation conducted in an existing industrial building. The actual coating usage in this operation is minimal. The spray booths and storage room are existing and not undergoing repair or renovation. The spray booths are constructed to modern standards and equipped with effective exhaust systems. All appropriate signage has been recently updated. The processes have been in operation in their current status since March of 2005. The hardship is that the operations are unable to function without the ability to operate their wood finishing equipment. The addition of suppression equipment inside the existing spray booths and storage room would require that these operations be taken off line for an extended time during the instillation. How long would it take to install? Were the installations of these spray booths and storage areas filed with State Plan Review? Tabled no proponent. Tabled no proponent. Tabled at the request of the proponent till the March meeting.

13-11-13 C Sincere Heart Adult Day Care Center – Merrillville

The code required sprinkler system and fire alarm system will not be provided for the I-4 occupancy adult day care. The proponent has attached a drawing of the facility that shows they are adding exterior doors to all of the rooms that currently do not have them. A manual fire alarm system and direct wired smoke detectors will be added in each room. The hardship is the cost of the sprinkler system is estimated at approximately \$20,000.00. What is the level of abilities of the people in the day care? Are they capable of self preservation? Tabled at the request of the proponent. Tabled at the request of the proponent, they got caught in traffic due to wreck.

- 14-1-1 C Georgetown Road Church/Everlasting Hope International Ministries Indianapolis

 The code required sprinkler system will not be provided for the A-3 Church building.

 The proponent advises that they will, in lieu of the sprinkler system, install an approved fire separation wall between the church area and the remainder of the building. The stated hardship is that, if the variance is not approved, the church will no longer be able to be located in the structure. The inspection report advises that the total square footage of the building is 12,640 sq. ft. and the occupant load is 347 in the church area. Tabled at the request of the proponent to get more information.
- 14-1-5 CI Stone Church Apartments Bloomington

 The furnace closet is in one of the bedrooms in a closet that is also used for the water heater which is not allowed by code. The proponent advises that the fresh air return for the furnace goes through the wall into the living room/kitchen area. The proponent advises that this conversion from a church to apartments was done in 1995 or 1996 and has passed the HAND inspection each time until now. Tabled incomplete, no proponent.

 Tabled incomplete and no proponent.
- B Roche Diagnostics Learning and Development Center Indianapolis
 In lieu of the code required 9.5 mm diameter suspension cables used for the elevator the variance request is to utilize the new elastomeric coated suspension constructed of six 2.5 mm steel cables and for the governor a 6 mm diameter suspension member. The proponent advises that these cables conform to the ASME A17.1, 2010 and ASME A17.6, 2010 and is ANSI AECO certified to ASME A17.7, 2007. The 6mm steel governor rope is designed to conform to ASME A17.1, 2010 and ASME A17.6, 2010 and is ANSI AECO certified to ASME A17.7, 2007. Tabled incomplete. Tabled incomplete.
- Iron Works Indianapolis

 In lieu of the code required 9.5 mm diameter suspension cables used for the elevator the variance request is to utilize the new elastomeric coated suspension constructed of six 2.5 mm steel cables and for the governor a 6 mm diameter suspension member. The proponent advises that these cables conform to the ASME A17.1, 2010 and ASME A17.6, 2010 and is ANSI AECO certified to ASME A17.7, 2007. The 6mm steel governor rope is designed to conform to ASME A17.1, 2010 and ASME A17.6, 2010 and is ANSI AECO certified to ASME A17.7, 2007. Tabled incomplete. Tabled incomplete.
- 14-1-32 B/D **Team Combat Live Hobart**A Chapter 34 evaluation has been done on this building which shows a -16.75 for fire safety, -11.95 for mandatory means of egress and -14.95 for general safety for a total of -43.65. The building exceeds the allowable area per code for an A-3 per Table 503 and of VB construction. The code allows 6,000 sq. ft. and with the area increase due to open space to 10,500 sq. ft. the building area is 12,800 sq. ft. The proponent advises that if they install a fire alarm system throughout the structure their score will change to -1.75 for mandatory fire safety, 3.05 for mandatory means of egress and 0.05 for mandatory

general safety. The installation of a fire suppression system is not within their budget capabilities. With the installation of the fire alarm system staff would recommend a "B" category. Tabled incomplete and no proponent. Tabled so proponent can get more information as requested by the Commission.

14-1-69(a)(b)(c)

Model Mill Building - Noblesville

Project #358940

- (a) This variance is a request to alter variance 13-02-27(a), based on the maximum occupant load of the 4th floor and the 5th floor rooftop loft and deck, and clarification of use of the rooftop deck as a photo location for a bridal party. The proponent advises that the building is fully sprinklered per NFPA 13. The building is equipped throughout with a fire alarm system and corridor smoke detectors. The 5th floor loft and exterior deck is limited in size approximately 475 sq. ft. total. A maximum occupant load of 25 will be posted for the 5th floor, and a maximum of 49 for the 4th and 5th floors combined. The 4th floor is 1,920 sq. ft. in area, and will be posted with a 25 maximum occupant load. The hardship is the revised occupant load is necessary to accommodate the present need for operating the business. The previous variance was based on the 4th floor use as an office.
- (b) This variance is a request to alter variance 13-02-27(a), based on the maximum occupant load for the 4th floor and 5th floor rooftop loft and deck, and clarification of use of the rooftop deck cupola as a photo location for a bridal party. The 5th floor cupola is provided with a single open egress stair to the 4th floor. The 5th floor area is 13' X 13' in size 169 sq. ft. with a useable floor area of 109 sq. ft. (minus the stair). An exterior rooftop deck of approximately 364 sq. ft. has been added, accessible from the 5th floor enclosed space. The 2 egress stairs from the 4th floor to the 3rd floor consist of one unenclosed interior stair and an exterior stair connecting the 4th and 3rd floors. The 4th floor has 1,920 sq. ft. of net floor area. The hardship is the revised occupant load is necessary to accommodate the present needs for operating the business.
- C (c) The interior stair serving from the 4th floor down to the 3rd floor will have only a handrail on one side rather than the code required one on each side of the stairs. The previous editions of the IBC (pre-2003) permitted a handrail along one side of a stair less than 44" in width. The hardship is due to the construction of the stair within the enclosing walls on each side, the addition would effectively reduce the width of the stair, reducing usability. Tabled so owner and proponent can meet with Dean Illingworth, the Building Law Compliance Officer, reference the changes. Tabled so proponent can have a sprinkler system flow test that meets the design criteria.

14-2-7 C Camp Potawotami – Cabins – Wolcottville

The code required sprinkler system will not be provided for the R-1 occupancy cabins. The proponent advises that they undertake the following alternatives in lieu of compliance with the code; they will use 1 hour fire rated construction to separate the bedrooms from the rest of the building, they will provide 3 exits from each bedroom, 2 of which will go directly to the outside in addition to the exit through the common area, the bedrooms will each have 3 windows sized for egress, and they will also install both manual and automatic fire alarm systems along with hard wired smoke detectors. The hardship is the cost to comply, the facility has its water supplied from wells and they do not have the capacity to supply a sprinkler system. The cost to install new wells and pumps to supply the sprinkler system along with the electrical systems needed would be

too expensive to be feasible for the camp. Is there any cooking in these cabins? Does each cabin comply as a "dwelling unit"? Tabled so proponent can check on the feasibility and cost of an NFPA 13D sprinkler system.

14-2-16 Club MRCE – Kendallville

Project #367176

The variance is to allow the building to be separated by the existing 12" or thicker masonry walls that separate this space from the remainder of the building, rather than evaluate the entire building as required by code for the Chapter 34 evaluation. The proponent advises that there is a small portion of wall that is frame construction with lath and plaster that is part of the stair. The request is to also permit the evaluation of the 1st floor only and not the 2nd floor or basement. The 2nd floor is separated with a suspended ceiling and above that lath and plaster. The basement is only utilized for mechanical service and not used for storage. The 2nd floor is abandoned and is in disrepair, the owner of the building is willing to secure the 2nd floor from use. The proponent advises that the access to the 2nd floor will be prohibited by locking of the south stair; the north stair will remain accessible for the apartment tenant in the adjacent building. The opening in the wall that accesses the 2nd floor on the north will be secured with a 1 ½ hour rated door that will be locked for use only by the fire department and maintenance as will the south door. There will be no cooking and snacks will be all that is provided. There are 3 exits and only two are required. The hardship is the current code deletes the section that allows this evaluation to be done. Tabled incomplete.

14-2-18 AI **Zurcher Tire – Monroe**

Project #368376

The code required restrooms will not be provided in this addition. The proponent advises that there are restrooms within 555 feet from the addition, but the code requires that the restrooms be within 500 feet. The hardship is that the owner would need to provide plumbing, drainage and new restrooms for the addition when the current restrooms are being used by the employees and there will be no new employees hired to work in the new space. **Tabled incomplete.**

New Variances:

14-03-1 CI Mount Pleasant Christian Church – Facilities Building – Greenwood

Project #361282, 360816, 360261

The code required telephone lines and a secondary means' of notification will not be followed for fire alarm system in each of 3 separate buildings. The proponent advises that they will instead use their local internet service to communicate to the monitoring company with a cellular telephone backup. The proponent advises that the IP Communications System is UL864 listed and is self polling every six minutes. The hardship is that using the modern technology will result in cost savings to the customer over the long term.

14-03-2 Void

14-03-3(a)(b) Indiana School for the Blind – Greenhouse Addition – Indianapolis

Project #367032

- CI (a) The ComCheck building envelope compliance certification for the addition to the existing greenhouse failed and is 3% less than allowed by code. The hardship is the compliance with the code would require the removal of structural members and installation of new structural members at a significant cost to the State. This is an addition to an existing greenhouse.
- CI (b) There are two common use toilet facilities provided and only one of them meets the accessibility requirements of the code. The proponent advises that, based on the occupant load of the facility, there is only one accessible toilet required and they have provided one. The hardship is the compliance with the code would require the removal of the non-compliant facility which would cause an inconvenience to the occupants as well as pose a significant cost to the State.

14-03-4 B Purdue University – Vawter Field Housing – 2012 – West Lafayette

Project #359486

An Otis Gen2 elevator will be installed utilizing (5) 60 mm steel coated belts as a means of suspension rather than the code compliant 9.5 mm ropes. The proponent advises that there are 2 elevators in this facility utilizing these steel coated wire ropes. Otis will install a permanent belt monitoring device on the elevator. The hardship is that the coated steel belts are an essential component to the Otis machine-roomless configuration of the Gen2 traction elevator.

- 14-03-5 B Purdue University Center for Student Excellence and Leadership West
 Lafayette Project #359734
 (Same as 14-03-4 except only one elevator).
- Project #368693 14-03-6 CI Exide Technologies - Repair Facility Addition - Muncie The largest opening allowed in a 4 hour fire separation wall is 120 sq. ft. and there will be an opening of 12 feet wide by 13 feet high placed in the wall. This is a variance on a variance (13-10-8) that allowed the proponent to not provide a fire suppression system for the H-4 occupancy due to issues related with environmental problems with potential water runoff. This variance is requesting the openings to be enlarged to allow the largest loader vehicle to move through the door without the possibility of being damaged. The largest loader is 10 feet wide and 11 feet 10 inches tall (these measurements are from the outside of the tires to the top of the exhaust pipe) The proponent is offering to comply with the current variance which provides an additional third egress from the repair facility room, construct a four hour fire wall system on three sides, separating the new addition and the existing building and provide an additional two fire extinguishers within the repair shop room. The hardship is that if this door is not allowed, there would possibly be damage caused to the building or equipment to move into the building thus causing the maintenance to be done outside of the building, which will exacerbate the lead contamination issue where the EPA is requesting increased mitigation. How much of the fire wall is left?

14-03-7 A Waste Management – Lafayette

Project #368857

A 12,000 gallon above ground diesel tank will be installed in lieu of the 10,000 gallon code allowed maximum size tank. The proponent advises that they are replacing some tanks and the new tank will meet the UL2085 criteria. The tanks are located in an area the public is not allowed. The old tanks do not meet the Federal SPCC regulations for leak detection monitoring and would be very expensive to upgrade those tanks, which are 25 years old. The new tanks will meet the Federal Regulations for leak detection monitoring.

14-03-8(a)(b)(c) Sleep Inn & Suites – Indianapolis

- B (a) 40 mm steel coated belts will be used in lieu of the code allowed 9.5 mm suspension means for the installation of the Gen2 elevator. The proponent advises that Otis will install a permanent belt monitoring device on the elevator. The hardship is the coated steel belts are an essential component of the Otis machine roomless elevator traction elevator. The elevator cost would be increased by over 30% and the building would require the construction of an overhead penthouse.
- B (b) This installation will utilize the ACLA buffers in lieu of the code allowed spring buffers. This installation is being requested under the "or equivalent" wording in the code. These type of buffers have been approved by AECO and the Commission has approved them in the past.
- B (c) The Gen2 elevator will utilize the 6.3 mm (1/4") diameter governor rope in lieu of the code allowed size. This type of installation has been approved previously by the Commission.

14-03-9(a)(b)(c) **Candlewood Suites – Bloomington** Same as 14-03-8(a)(b)(c).

Project #365903

14-03-10 CI Stadium Flats – Indianapolis

Project #366428

The code required sprinklers above the balconies will not be provided for the third floor balconies on this three story R-2 occupancy structure. The proponent advises that there is not a roof or deck above the third floor balconies. The development includes 144 units located in four separate three story buildings on the site. There will be sprinklers provided underneath each of the balconies to protect the balcony and patio below as required. The hardship is that the sprinkler would be of very minimal benefit due to not having a roof or deck above to capture the heat from a fire to actuate the sprinkler.

NVRI Crop Production Services – Seed Storage Facility – Wheatland Project #368521

The items listed in Table 29 that are required for Storage facilities will not be provided.

The items required include restroom, eyewash station, emergency shower, drinking fountain, etc. will not be provided. The proponent advises that these facilities are provided in other structures on the same property, according to the drawings provided the farthest structures from the new building is 351.3 feet, with one structure located closer. The proponent advises that this structure will not have employees in it on a regular basis. This is a non-conditioned structure, used to store seeds. The hardship is the requirement for the plumbing fixtures per Table 29 would cost an additional 10% in the initial construction costs.

14-03-12 NVR Wabash Valley Goodwill - Terre Haute

Project #367688

ag of clothing and other

Same as variance 14-03-11, the building will be used for the storing of clothing and other Goodwill type items. The other buildings are within 28 feet with the required plumbing fixtures.

14-03-13 DI Roche Diagnostics – Indianapolis

Project #647307

The 2 monumental stairs in the 3 story building will be open to all 3 levels which is not allowed by the code. The 2 monumental stairs in the 3 story structure will have one side bounded by the exterior wall and 2 sides will be bounded by interior glass walls and open on the 4th side. The glass walls will be of non-rated glass. The proponent advises that the variance is proposed to separate level 3 from the stairs/floor openings (and thus the floors below) with non-fire rated glass and non-fire rated opening protection, such that upon a fire event the stairs/floor openings would only connect the first two building levels. The proponent advises that upon activation of the fire alarm, the openings on the one side between the stairs/floor openings and level 3 will be closed (protected). The fire alarm activation will occur via automatic sprinkler water flow and via smoke detection at the level three ceiling both above and adjacent to the stairs/floor openings. The opening will be closed (protected) either via non-fire rated doors or the McKeon Vertical Coiling Protective Model D200. The monumental stairs will not be designated or indicated as exits. Why are they not using close spaced sprinklers to protect the non-rated glass or rated fire doors?

14-03-14 CI North Harbor – Sites A & B – East Chicago

 \mathbf{C}

The code allowed 20 foot dead end corridors will not be followed in multiple locations in this 4 story R-2 structure and they will instead have multiple 50 foot dead end corridors. The proponent advises that the building will be sprinklered and is group R-2 occupancy. The hardship is that the program and the City of East Chicago want a "partial" 4th floor and in order for the exit stair to be within the 4th floor enclosure the stair location on floors 2 and 3 will require a 50 foot dead end. This appears to be two separate buildings, but more information is needed.

14-03-15(a)(b)(c)(d)(e)(f)(g)(h) Project Emerald Ash Office Tower – Fort Wayne

(a) The variance request is to permit the entire development to function as a single building for purposes of applying code requirements. The proponent advises that the garage portion of the building is owned by the City and the rest of the building is under another ownership. The separation is one over the other which is different than those normally seen by the Commission and is not recognized in the code for a division by a party wall. The Ash Tower will occupy floors 5 – 8 on the east end of the Project Emerald development. Floors 1-4 of the development will include the parking garage and 1st floor retail/restaurant tenants. There will be a 2 hour horizontal assembly to separate the 4th and 5th floors. The project also includes a residential tower on floors 5-17 on the west end of the development. The proponent advises that the entire development is designed as a single high rise building of Type IB construction. The building will be

- protected throughout with an automatic sprinkler system per NFPA 13, including the parking garage. There are legal easement agreements in place to ensure fire protection systems and means of egress elements are maintained in perpetuity. The hardship is the shared ownership of the structures is a necessary development of the project.
- C (b) The occupant load of the 6th floor, for purposes of applying egress width requirements, will be based on non-simultaneous use of the conference center with row seating and the dining/fitness facilities. The egress width proposed will accommodate 660 occupants and the calculated occupant of the conference center is 572 based on 7 sq. ft. per person. The conference center, dining, and fitness facilities are for corporate use and not rented out to outside groups. The hardship is the cost to provide additional stairs and/or stair width to accommodate an unrealistic occupant load based upon the actual use of the 6th floor. What is the calculated occupant load of the 6th floor?
- (c) Certain elements of the structural framing and roof assembly within the 3 story atrium space connecting floors 6-8 will be unprotected, which is not permitted by code, based on the building construction of type IB and the roof structure (less than 20 feet above the floor) and structural frame where supporting the roof is required to be 1 hour rated. The proponent advises that there will be sprinklers provided at the top of columns to spray the web of the steel. The application of water will absorb the heat from a fire impinging upon the column, providing sufficient cooling to protect the steel from structural failure. Where the atrium roof steel is less than 20 feet above the floor below, the sprinkler design density will be increased from the required 0.1 gpm per sq. ft. to 0.2 gpm per sq. ft. The hardship is the exposed steel within the atrium is a critical design feature of the atrium space.
- (d) In lieu of the method in Section 909 of the IBC to figure the air exchange in the atrium the atrium, smoke control system will be designed for 6 air changes per hour for the volume represented by the projected area indicated on the plans. The atrium will connect floors 6-8 in the Ash Brokerage tenant space. The proponent advises that the use of a prescriptive method was permitted in editions of the Indiana Building Code previous to the 2003 edition and that, due to the relatively small projected area of the atrium, the methods in Section 909 for determining atrium smoke control exhaust rates are not suitable in this application. The hardship is the exhaust rates determined by the methods in Section 909 result in an unworkable solution due to the exhaust rates derived, and with no benefit to life safety. What are the code based rates?
- C (e) The stair pressurization system provided for the two enclosed stairs serving the office tower will be designed to provide a design pressure difference of 0.05 w.g. in lieu of the required 0.15 w.g. The proponent advises that the design pressure is permitted per NFPA 92A, "Standard for Smoke Control Systems", Table 4.4.2.1.1 in buildings protected with automatic sprinkler systems. The design pressure difference specified by NFPA 92A will provide for better accommodation of door opening considerations in the design of the system.
- A (f) The code required elevator lobby vestibules will not be provided for floors 5-8 of the Ash Tower, which are required due to the classification as a high rise building. The proponent advises that the building is protected with an NFPA 13 sprinkler system. A NIST contracted study of elevator lobbies in tall buildings concluded in part that "enclosed elevator lobbies are not necessary in buildings with operational sprinkler systems". The hardship is that the walls and doors forming elevator lobbies would

- interrupt and restrict pedestrian movement on each floor and conflict with other architectural objectives.
- C (g) The penthouse will exceed the permitted 1/3 of the roof area. The proponent advises that the mechanical penthouse will be used solely for "shelter of mechanical equipment or shelter of vertical shaft openings in the roof" per Indiana Building Code penthouse restrictions. The penthouse area to roof area is required due to the size and complexity of the mechanical systems serving the building. The mechanical penthouse will be normally unoccupied and will be occupied only infrequently by maintenance personnel to access equipment. The building is protected throughout with an automatic sprinkler system per NFPA 13, including the mechanical penthouse. The hardship is restricting the size of the penthouse is not feasible, the additional construction costs would include fireproofing of the steel structure of the penthouse, due to classification as a "story" in lieu of a penthouse. What is the area of the penthouse?
- (h) The code required 2 way communications system for the fire department will not be provided. This feature is required for high rise buildings. The proponent advises that the Fort Wayne fire department has stated that they would not use a fixed system for their emergency personnel. Their method of communication in the building will be portable radios. All other required features will be provided, including a fire command center on the 1st floor. The hardship is the cost to provide a system that will not be used by the fire department personnel. Did the fire department provide a letter?

14-03-16 CI The McCurdy Apartments – Evansville

This is a variance to the previous Rule 8 that was approved and is now being evaluated under Chapter 34, in order to continue using the structure that is a historic hotel building and was later used as an assisted living and nursing home. The proponent advises that they are seeking to apply for a CDR to remodel into upscale apartments, reuse the existing restaurant and convert the existing hotel meeting room into a pub. They advise that to obtain the CDR, they are required to recalculate the evaluation using the current Chapter 34. The new use R-2 will have an NFPA 13 sprinkler system and is much less risk than the previous I-2 that was not sprinklered. An NFPA 72 automatic fire alarm system with voice communication will be provided. Smoke detection will be provided in all corridors, elevator lobbies, stairways and in HVAC return ducts throughout the building. Single and multiple station smoke detection will be provided in dwelling units and guest rooms. The building is of Type IA construction. The Chapter 34 evaluation will score as follows, for Fire Safety -60.6, for Means of Egress -68.6 and General Safety -68.6. The proponent has given a fact sheet that explains the scoring for Sections 3410.6.5 Corridor Walls, 3410.6.6 Vertical Openings, 3410.6.7 HVAC Systems, and 3410.6.17 Automatic Sprinklers. The hardship is that in order to make adaptive reuse of buildings of this size and occupancy economically feasible, some of the original features and ventilation systems must be reused.

14-03-17(a)(b)(c) Project Emerald – Skyline Residential Tower – Fort Wayne (a) The variance request is to permit the entire development to f

(a) The variance request is to permit the entire development to function as a single building for purposes of applying code requirements. The proponent advises that the garage portion of the building is owned by the City and the rest of the building is under another ownership. The Skyline Residential Tower will occupy floors 1-2 and floors 5

- −15 at the west end of the Project Emerald development. The parking garage component will adjoin the 1st and 2nd floor levels and will occupy the entire area of floors 3 and 4 within the footprint of the tower. The entire development is designed as a single high rise building of Type IB construction. The building will be protected throughout with an automatic sprinkler system per NFPA 13, including the parking garage. There are legal easement agreements in place to ensure that shared fire protection systems and means of egress elements are maintained in perpetuity. The hardship is the shared ownership of the structures is a necessary feature of the successful development of the project.
- AI (b) Elevator lobbies will not be provided on any floors of the residential tower as required by code, due to the classification of the building as high rise. The Skyline Residential Towers will occupy floors 1-2 and floors 5-15 at the west end of the Project Emerald development. The building will be protected throughout with an automatic sprinkler system per NFPA 13. The walls and doors forming elevator lobbies would conflict with other walls and doors on each floor, given the tight core area involved.
- CI (c) The code required 2 way communications system for the fire department will not be provided. This feature is required for high rise buildings. The proponent advises that the Fort Wayne fire department has stated that they would not use a fixed system for their emergency personnel. Their method of communication in the building will be portable radios. All other required features will be provided, including a fire command center on the 1st floor. The hardship is the cost to provide a system that will not be used by the fire department personnel. Did the fire department provide a letter?
- 14-03-18 CI Franciscan St. Anthony Health Physician Office Renovation Michigan City

 An addition will be made to an existing hospital building and the addition will be made to
 a portion of the facility that has unprotected construction and that is separated from the
 main hospital with a 2 hour fire barrier in lieu of the code required 3 hour fire wall. The
 proponent advises that the facility is protected throughout with sprinklers. The facility
 complies with the provisions of NFPA 101 the 2000 Edition. The addition will be made
 of noncombustible construction and this portion of the facility is for outpatient care only.
 The addition is an expansion of the adjoining space and is not practical to provide a fire
 wall at the point of the addition. The fire barrier providing the building separation is an
 existing masonry wall. Why not a 3 hour fire barrier?

14-03-19(a)(b) Greenwood Pizza King – Greenwood

 \mathbf{C}

Project #368765

- (a) The existing wall is being upgraded to a 2 hour fire resistive assembly which requires metal studs, but the existing wall will have wood studs. The existing wall is wood stud with 5/8" Type X drywall on each side of the stud and 2 additional layers with 5/8" Type X drywall will be added to one side for a total of 3 layers on one side and 1 layer of 5/8" Type X drywall on the other. The hardship is the cost to remove the existing wall and the disruption of the business of the adjacent tenant.
- C (b) The existing building is over area for the "B" occupancy of wood frame construction and the change of use to an A-2 will put the building into further noncompliance. The proponent advises that a fire barrier will separate the new assembly occupancy from the rest of the building. This assembly occupancy is a family dining restaurant with an occupant load of approximately 64. The hardship involves the cost of removal of the existing wall and the disruption of the business of the adjacent tenant.

CI 14-03-20 Carnahan Hall - Lafayette

The variance is a request for the mandatory fire safety score to be lowered from 19 to 13.7. The existing building was most recently used for an art gallery and tea shop and there will be a change of occupancy, so the building will be used for banquet space and a concert venue. The proponent advises that the building will not be made to comply with the rules of the Commission. There has been an analysis done per Chapter 34 Section 3410 of the IBC, which found the discrepancy in the score needed to pass. The building meets Type III-B construction and is within the allowable area and height for an A-2 occupancy of this construction type. After the Section 3410 evaluation, a 5.3 point short fall was identified in the Fire Alarm Safety Column. The hardship is that there is no proposed construction at this time and, as such, the cost of a sprinkler system (\$75,000,00) is not supported in the budget for the tenant change.

Brownsburg Meadows - Brownsburg 14-03-21 DI

Project #315028 The existing dining room/parlor, which is in excess of 750 sq. ft. (approximately 1,435 sq. ft.) is proposed to have a 2nd means of egress that goes to the exterior courtyard and must reenter the building in one of two locations to reach the exit discharge. The code requires that once a given level of protection is achieved it cannot be reduced before reaching the public way. The proponent advises that the door to the courtyard will be reversed to swing in the direction of egress. The courtyard is provided with 2 means of egress, consisting of doors swinging into the building, in the direction of travel, providing access to the exterior via an intervening "lounge" spaces. The building is protected with an NFPA 13 sprinkler system. The building is classified as I-2, I-1, and A-2 per the original CDR. The hardship is that there is no feasible way of providing the 2nd means of egress directly into the interior of the building.

DI 14-03-22

University of Southern Indiana – Teaching Theater – Evansville Project #358851 The stairs for the theater seating steps will not have uniform tread depth as required by code. The proponent advises that the stair treads in the sloped seating area will be a minimum of 11" deep except at the seating rows where they are increased to 16" deep. This configuration will provide additional foot room for maneuvering from the steps into the seating row. The elevation of 16" treads are the same as the seating row walking surface. The 16" deep treads are uniformly spaced throughout the stair. The proponent advises that the uniform 11" tread depth would be unsafe as the step would be a tripping hazard for patrons moving out of the seating rows. The hardship is that the uniform tread depth would be unsafe for patrons entering and exiting the seating rows.

14-03-23(a)(b) CI Indy Storage Depot - Storage Building #10, Indianapolis Project #368382 (a) The code required fire hydrant will not be provided within 400 feet of the storage building proposed to be constructed on the existing Indy Storage Depot site. The proposed 1 story self storage building will be 16,000 sq. ft. in floor area. The building is classified as a S-1 occupancy of Type VB construction. The building will be post frame construction with wood framed exterior walls and pre-manufactured wood trusses. The ceiling and both sides of exterior walls will be sheathed with steel siding. The proponent advises that the building will be used exclusively for self storage, with no storage of

hazardous materials. The building is sheathed on the interior and exterior with steel siding. The hardship is the estimated cost of \$35,000.00 to \$40,000.00 to install a fire hydrant which would provide the hydrant 600 foot extension of the Citizens Water line to the property and installation of the hydrant. Are there any fire hydrants at all? If yes then how far way are they?

NVRI (b) The code required plumbing fixtures, including emergency showers, eye wash station, service sink, and drinking fountain and toilet facilities will not be provided. The building is classified as an S-1 occupancy of Type VB construction. The proponent advises that the building is used exclusively for self storage, with no storage of hazardous materials. There are toilet facilities provided at the main office for employees. The hardship is the cost to provide plumbing fixtures for which there is no public benefit.

14-03-24(a)(b)(c) Central Library – Parking Garage Elevator Project – Indianapolis

- (a) The elevator hoistway enclosure will be 2 hour rated on each of the 2 basement parking levels, but will be enclosed with nonrated glazing at the on-grade access lobby, the rating is technically required at this level, since containing a small lobby space. The proponent advises that the exception in Section 903.3.1.1.1 of the Indiana Building Code states, the intent is to not provide protection within the hoistway by virtue of the 2 hour rated enclosure. The project involves construction of a new elevator within the footprint of the 2 garage levels, with a plaza level access external to the library. The proponent advises that the new elevator will provide a means for use of the garage by the public without having to access the library, providing a means to lease spaces in the garage with 24/7 access. The new plaza level structure will be approximately 470 sq. ft. in area. The 2 hour rated enclosure will be provided between the elevator hoistway and the parking garage levels – elevator is open to only the lobby and top level of the stair. The lobby will have noncombustible wall and ceiling finishes, with no combustible fire load. There will be automatic sprinkler protection provided in the lobby space as required. The parking garage levels are protected throughout with a sprinkler system. The elevator will be provided with a glazed enclosure at the top level for security purposes.
- CI (b) The stair included in the project will be 2 hour rated on each of the 2 basement parking garage levels, but will not be enclosed at the on grade plaza access lobby the rating is technically required at this level, since containing a small lobby space. The project involves construction of a new elevator within the footprint of the 2 garage levels, with a plaza level access external to the library, providing a means of lease space in the garage 24/7 access. The proponent advises the stair is not a required means of egress for the garage it is for convenience only. The 2 hour rated enclosure will be provided between the stairway and the parking garage levels the stair is open to only the lobby. There is an automatic sprinkler system provided in the lobby space, as required. The parking garage levels are protected throughout with the sprinkler system. The stairs will be enclosed at the top level for security purposes. The plaza level lobby is transparent for purposes of personal safety and security.
- CI (c) The roof and structural columns supporting the roof will not be fire rated as required by code for Type IA construction. The proponent advises that the 470 sq. ft. lobby will have noncombustible wall and ceiling finishes, with no combustible fire load. The lack of fire resistive roof structure in the plaza lobby will not be adverse to the safety based upon lack of any fire hazard in the lobby. The structure for the lobby is structural steel

to support a small roof – fire proofing this structure would add no benefit to public safety. What is the cost to comply? What is the hardship?

14-03-25(a)(b)(c)

NVRI (a) Sliding doors will be installed at the entrance to the bathrooms in the patient rooms in lieu of the required side hinged swinging doors. The proponent advises that the rooms served by the sliding doors will have an occupant load less than 10. The building is sprinklered throughout. The hardship is that the use of swinging doors to the bathrooms is less efficient than the use of the sliding doors because of the unusable space due to the swing area that cannot be used any other way.

- (b) The request is to allow the nurses area and common areas to be open to the corridor in the assisted living facility, I-1 occupancy. The code requires corridors to be 1 hour fire resistive construction and does not permit them to be interrupted by intervening rooms except for foyers, lobbies and reception rooms. The common areas include game areas, pub, and dining and nourishment/server kitchen. The 2 story building is of Type VA construction. The 1st floor is a nursing home, I-2 occupancy and the 2nd floor is assisted living I-1 occupancy. The hardship is the owner wishes to provide an open and inviting appearance to these areas for the residents of the assisted living facility. What percentage of the length of the corridor is open?
- (c) The request is to permit non-rated windows in the 1 hour corridor at the nurse work CI area, I-1 occupancy. The code requires corridors in an I-1 occupancy to be 1 hour fire resistive construction and openings in the wall to be 20 minute rated. The non-rated windows are 6.7% of the length of the corridor wall. The 2 story building is Type VA construction. The 1st floor is a nursing home, I-2 occupancy, and the 2nd floor is an assisted living I-1. Proponent advises that they will undertake the following alternative actions: the building is protected throughout with a sprinkler system per NFPA 13 for the entire I-1 occupancy with quick response sprinklers. All smoke compartments in the I-2 occupancy that contain sleeping rooms are protected with quick response sprinklers as required by code. Smoke detection is tied to the fire alarm system will be provided in the nurse work area. The facility will be licensed and must comply with NFPA 101 as well as the Indiana Building Code. The I-1 occupancy is divided into 2 buildings by a 2 hour fire wall. Buildings by a 2 hour fire wall. Building 1 is 13,491 sq. ft. and Building 2 is 8,210 sq. ft. The I-1 occupancy is separated from the I-2 occupancy by 2 hour construction. The maximum travel distance is 156 feet to a 2 hour enclosed exit stair that discharges to the exterior, code permits a travel distance of 250 feet. The owner wants to enclose the nurse work area to protect the privacy of the patient when making phone calls, having discussions, etc., while maintaining the visibility of the corridor.

14-03-26(a)(b)

CI

Mishawaka Grove Development – Mishawaka

(a) The 4 story residential "South Bank" portion of the development on top of the 1 story Type IA podium building will have units on each end of the corridor with a common path of travel over the permitted 75 feet. The proponent advises that the distance will be 92 feet on the 2nd and 3rd floors, 88 feet on the 4th floor and 85 feet on the 5th floor. The residential building is classified as R-2 occupancy and Type VA construction (protected with an NFPA 13R sprinkler system), and the 1 story podium structure is classified as Type IA construction (protected with an NFPA 13 sprinkler system) and will include

parking and commercial tenants. The proponent advises that the 2012 Edition of the International Building Code, Table 1014.3 permits up to 125 feet of common path of travel in an "R" occupancy building protected with a sprinkler system per NFPA 13R. This provision is proposed to be included as part of the 2014 Indiana Building Code in LSA Document #13-339. The proposed design will comply with all applicable provisions of Chapter 10 of the 2012 IBC, as proposed to be amended in the 2014 Building Code. The proposed stair placement, which directly affects common path from upper floors, is based upon optimal design efficiency.

AI (b) A 4 story residential "South Bank" portion of the development on top of the 1 story podium building will have units on each floor with an aggregate calculated occupant load of more than 10 with a single means of egress to the common corridor. The calculated occupant load on the east end will be 20 (just under 4,000 sq. ft. of aggregate apartment area) on the 2nd and 3rd floors, 19 (just under 3,700 sq. ft. of aggregate apartment area) on the east end of the 4th floor, and 15 (just under 3,000 sq. ft. of aggregate apartment area) on each end of aggregate apartment area) on each end of the 5th floor. Access to 2 exits for all dwelling units is provided as required per Section 1019.1 in the 2008 Indiana Building Code. The proposed stair placement, which directly affects occupant load with a single means of egress to the common corridor is based upon optimal design efficiency.

14-03-27 DI Ford Center – Evansville

Project #342978

Locker rooms "B" and "C" have non-code compliant locking devices, which are thumb turn locks. The proponent advises that the staff will unlock the doors during any planned use of the locker rooms "B" and "C". They will also install a sign with 2" letters that reads, "THIS DOOR SHALL REMAIN UNLOCKED DURING ANY USE OF THE LOCKER ROOM". The proponent advises that the locks were installed to prevent unauthorized entry when the locker rooms were not in use. There are 4 additional accessible locker rooms and three dressing rooms provided. The hardship is that the locks were installed at the time of construction in 2011. The estimate to install push exit devices is in excess of \$4,000.00. The posting of the sign, as proposed above, is only permitted at the main entrance to a Group A occupancy with an occupant load of 300 or less, Groups B, F, M, and S, and in places of religious worship, the main exterior or doors are permitted to be equipped with key operated locking devices from the egress side provided:

- 2.1 The locking device is readily distinguished as locked.
- 2.2 A readily visable durable sign is posted on the egress side of or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN THE BUILDING IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.

In this type of facility, someone could get locked into the room and not be found for quite some time. Why can't compliant devices be used?

14-03-28 AI Bloomington High School – North Security Grille – Bloomington

A coiling cross corridor security grille will create a dead end corridor of 49'9" in length which is not allowed by code. The measurement is measured from the main lobby. The proponent advises that based, on the corridor width of 18', the permitted dead end is 45

feet. The building is protected throughout with a sprinkler system. The security grille is needed to control access from one portion of the building to another for certain after school hour events.

14-03-29 AI Holy Life Missionary Baptist Church – Stair Lift Installation – Indianapolis Project #361427

The code required minimum 44" wide stair will not be provided due to the installation of the stair lift. The current stairway is 54" wide and with the stair lift installed and in the horizontal position the clearance will be reduced to 40". The proponent advises that there is a second approved exit stair case that is approximately 50' away from the current stairway. The proponent advises that the stair lift will be in the folded position when not in use. The hardship is the widening of the exit staircase is not feasible due to the cost of widening load bearing stair walls.

14-03-30 AI Butler University – Hinkle Fieldhouse – Renovation Phase 2 – Indianapolis

The replacement of the lower tier bleachers will include aisle stair riser height non-uniformity, with risers at the bottom of the run being 3 ¾" in height. The code permits non-conformity of riser heights to the extent necessitated by the gradient of the adjacent seating to maintain sight lines, but required a minimum riser height of 4". The project includes partial replacement of spectator seating within the seating bowl of the 1928 Hinkle Fieldhouse structure on the Butler University Campus. There will be a net loss of total seating from approximately 10,000 seats to approximately 8,500 seats. The proponent advises that they will provide contrasting marking stripes on each tread where riser heights vary and also on those that are less than 4 inches in height. The proponent advises that this is a significant improvement of the existing conditions where riser heights vary from 7 to 9 inches in height and where widths of aisles are not compliant with current code. The hardship is due to constraints imposed by existing bowl configuration; the replacement seating cannot feasibly provide the required minimum 4 inch riser heights for the lower seating tier.

14-03-31 BI **580 Carmel – Carmel**

One of the two means of egress stairs will not be enclosed with 1hour fire barriers at each floor as required by the code. The proponent advises that, due to the stair connecting 3 floor levels, the stair is required to be enclosed. The 3 story building will be classified as "B" occupancy of Type IIB construction, with approximately 7,920 sq. ft. of floor area per story. The proponent advises that they will undertake the alternative actions in lieu of compliance with the code: The building will be protected with an NFPA 13 sprinkler system. The floor opening in each case will be protected with a bulkhead a minimum of 18" in depth with a sprinkler water curtain along the bulkhead per NFPA 13. The water curtain will be designed to deliver a minimum discharge of 3 gpm per lineal foot. The hardship is the open stair is desired as a feature to enhance leasing prospects for the 2nd and 3rd floor office tenants.

14-03-32 C Jane Pauley Community Health Center – Indianapolis

The code required fire rated construction, based on an occupant load in excess of 30, will not be provided for the egress corridors (walls and doors) as part of the tenant build-out.

The proponent advises that the project involves a tenant build-out of approximately 8,000 sq. ft. of floor area for outpatient medical offices. The 1 story building, 11,700 sq. ft. in total area is classified as "B" occupancy of Type VB construction. The existing tenants to remain include an existing pharmacy that has been in continuous use since 1957, dating to the original construction of the building, and an attorney's office. There are several items that the proponent advises will be provided that are not required by code, such as a smoke detection system and a fire alarm system. There will be 3 exits to the exterior provided from the corridor, with 2 additional exterior exits provided directly from the spaces within the tenant space. The maximum egress travel will be less than 100 feet, which the code permits up to 200 feet. The hardship is the fire rated corridor construction is a logistic and operational hardship, including lack of existing ceiling height available to create a rated corridor envelope with complying ceiling construction, closing off nurse station and other staff areas and proving door closers on all exam rooms.

14-03-33 BI Fairmount Camp Dining Hall – Fairmount

The proposed dining hall for campers will not be provided with the code required automatic sprinkler system. The proponent advises that the new A-2 facility has a fire area exceeding 5,000 sq. ft. and an occupant load in excess of 100. The one story structure will be 6,000 sq. ft. in area and have seating area for 296 occupants. The building, according to the plans, is 142' 10" X 42' in area. The dining area has 5 exterior exits and will have a maximum travel distance of less than 70'. The building will also have a manual and automatic fire alarm system, the code only requires a manual system. The building will also be provided with a smoke detection system, with heat detectors in the kitchen that will initiate the building alarm system, which is not required. The kitchen cook top is provided with a Type I hood and protected with a fire suppression system, as required by code. There will be no alcohol consumed in the dining hall. The hardship is that the site does not have any water supply system capable of supplying a sprinkler system. The cost to bring a water main across State Road 26 to the site and installation of the sprinkler system is estimated to be \$90,000.00.

14-03-34 CI St. Mary Parish – Phase II Building Expansion – Greensburg

The variance request is to permit a combined use unlimited area building using Section 507.3, for "E" occupancies and Section 507.6, for A-3 occupancies of Type IIB construction. The proponent advises that the requirement of Table 503 and allowable increases only allow a maximum area of 54,375 sq. ft. The proposed 1 story addition of 50,225 sq. ft. and the existing area of the current building to be attached to is 49,375 sq. ft. which will exceed the maximum allowable area for a Type IIB structure. The proponent advises that the addition will be sprinklered throughout and the current existing building is currently sprinklered. All requirements applicable to each use relative to means of egress and fire protection system requirements will be met as required. The actual fire and life safety hazard proposed by the combined occupancy use of the building is no more hazardous than either an A-3 alone or an E occupancy alone. The hardship is the strict interpretation requiring separate buildings to qualify for unlimited area would require a 4 hour fire wall between the 2 major occupancies involved, which is an operational hardship and is not practicable. Students will attend

Mass in the Worship Center periodically during the week and there will be combined use of the building overall by the school and the parish membership.

Indiana Math and Science Academy - Addition and Renovation - Indianapolis 14-03-35 CI The variance is to allow the existing 2 hour fire barrier separating the existing 2 story building from the existing 1 story school building to be considered equivalent to a 2 hour fire wall for: 1) the purposes of calculating allowable area for the 1 story school building plus the proposed addition; and 2) to permit the 2 story building to be considered a separate building for purposes of evaluating per Chapter 34 for the change in use from the original A-2/B use originally constructed for Ivy Tech Culinary School to proposed "E" occupancy. The project involves the construction of a new gymnasium and connector addition to the existing 1 story "E" occupancy school building and interior build out of the 1st floor of the existing of the existing 2 story building for high school (grades 9-12). The 2^{nd} floor is planned to be occupied in a few years for additional high school use. The proponent advises that the existing 1 and 2 story buildings are protected throughout with automatic sprinkler system's. The proposed addition will also be protected with an automatic sprinkler system. The door openings in the 2 hour fire barrier will be provided with 90 minute rated fire assemblies as required. The hardship is the cost to construct a 2 hour structurally independent fire wall within the existing structure, as well as the logistics of evaluating the 2 story building for change of occupancy.

14-03-36 CI Greenwood Southwest Elementary School - Greenwood Project #364055 The noncompliant dead end corridor of approximately 40 feet will be put in place due to a set of doors being placed across the corridor. The proponent advises that the doors are being installed as a security system to prevent unwanted access into the school during after school hours. The proponent advises that the corridor width is just over 13' 4" and the permitted dead end is approximately 33'. The project involves a 1 story addition of approximately 6,500 sq. ft. including a media center and administrative offices. The building is classified as "E" occupancy with less than 10% "B" occupancy accessory occupancy administrative offices. The sprinkler system will be extended from the addition into the existing corridor with the dead end. The addition, including the new corridor connecting to the existing corridor is protected with an automatic sprinkler system. There will be an egress door provided into the existing cafeteria from the existing corridor. The hardship is that the doors across the corridor are needed to provide security from unwanted access into the school during after school hour's occupancy of the front portion of the building. How does a person exit from the dead end?

14-03-37 CI **Do 317 Lounge – Indianapolis**

The request is to permit the tenant to move to a 1st floor space, from the 2nd floor, and maintain the same conditions that were allowed in a previous variance, 13-07-54, for the area on the 2nd floor. The proponent advises that the proposed tenant space will occupy approximately 1,800 sq. ft. but will have a calculated occupant load virtually identical to the previous space (126 current vs. 119 existing), as space will be occupied by a storage room, and hallway not provided in the current 2nd floor space. The tenant occupancy of this space will be a change of occupancy from previous B/M occupancy to an A-2 lounge. The request is to permit the A-2 occupancy use without complying with either

requirements for new construction or with Section 3410 of the Indiana Building Code. The tenant space will have standing room for much of the space plus a small performance platform for live music and presentations. Live music will occur 4 to 8 times per month. The space will also be used as a small group meeting space or other events occasionally. The building is the old G. C. Murphy building in Fountain Square and is comprised of 2 separate structures dating from the mid 1880's and 1920's. The building is Type IIIB construction with approximately 57,000 sq. ft. of total floor area. The building is 2 stories in height with a small partial 3rd story. The proponent advises that the tenant space will be provided with a fire alarm system, consisting of horns and strobes and a smoke detection system. Actuation of the fire alarm system will shut down the sound system via a shunt trip. There will be no cooking within the tenant space; they will have minimal pre-pared foods served. The hardship is that due to the small size of the area (less than 2%), the cost to bring the building into compliance would not be feasible, economically. What is the cost to sprinkler the new space?

14-03-38 CI Hotel Broad Ripple – Indianapolis

Project #362922

The fire alarm system detectors are designed to meet the smoke alarm requirements within individual guest rooms, in lieu of a separate system of smoke alarms not connected to the building fire alarm system. The project involves the conversion and renovation of 2 existing structures for use as a hotel with 9 guest rooms. Each structure was originally a single family dwelling. The south structure has been used for various commercial purposes historically. The building is classified as Type VB construction and was evaluated per Chapter 34 for the change of occupancy. The project also included a small 1 story connector addition between the 2 structures. The use of "fire alarm system" detectors" are permitted to satisfy the smoke alarm requirements with guest rooms per Section 11.5 of NFPA 72 the 2002 Edition, however Chapter 11 was deleted in its entirety in the Indiana Amendments and was also amended to delete in the proposed new 2010 NFPA 72. The proponent advises that this installation does meet the requirements of the model code. The system detectors in each guest room receive their primary source of power from the building's wiring system via the fire alarm panel and have a backup source via the integral battery system for the fire alarm system as a whole in compliance with NFPA 72. The proponent advises that the as-designed and as-built system provides a higher level of reliability and safety than that of a separate system of smoke alarms.

14-03-39 CI Gro-Alliance Corn Storage Facility – Howe

The code required sprinkler system required for an S-1 structure will not be provided. The proponent advises that the facility is located in an area where there is no municipal water available. The proponent advises that they will install a dust collection system to alleviate any potential explosion factors. Additional exits will also be provided to maintain shorter exit travel distances. The hardship is that the site is located in an area that does not have municipal water and the cost of the sprinkler system would be prohibitive and water in the building could be a potential source of injury to the stored product. Is the dust collection system constructed in accordance with any nationally recognized standard?

- 14-03-40 CI Center Grove Professional Resource Center Phase 2 Renovations Greenwood The code requires the building addition of approximately 1,200 sq. ft. to meet the current rules of the Commission. The GAR requires the building to meet the current code for allowable floor areas. Assuming that the building type is Type IIB construction, the building with the addition will not meet current code limitations of 25,375 sq. ft. The rules would require a 4 hour structurally independent fire wall, sprinklers or upgraded construction throughout. The proponent advises that the new addition will be separated by a 2 hour fire barrier. The addition is approximately 2.2% of the existing building. There are at least 2 pre-1998 fire walls in the school. It is assumed the existing fire walls are not structurally independent. The hardship is the cost to provide a structurally independent fire wall or sprinklering the entire building.
- **EPE Pro-star and 4th Floor West Lafavette** CI Project #369716 14-03-41 The code required one hour occupancy separation in a sprinklered building will not be provided and the walls separating the occupancies will not be one hour fire rated assemblies with opening protectives. The second floor of a university office, classroom and lab building will have some classrooms on the 2nd floor. The proponent advises that the building will be protected throughout with an automatic sprinkler system per NFPA 13. The 2nd floor sprinkler system is designed for Ordinary Hazard Group 1. The code minimum is Light Hazard for offices and classrooms. The portions of the floor structures above and supporting the classrooms are 1 hour fire rated floor assemblies. The accessory use areas less than 10% of the floor area are not required to have fire rated separations. The classrooms are only approximately 16% of the floor area. Classrooms do not present a greater fire hazard to the offices. The hardship is the cost to provide opening protectives in the walls, walls to deck, and the installation of fire rated glazing for the elevator lobbies. What is the cost?

14-03-42(a)(b)(c) Scott County Jail – Addition and Renovations – Scottsburg

BI

- (a) The existing 1 story non-sprinklered jail constructed of Type II-B construction will be separated from the new addition, constructed of Type II-B construction and sprinklered and separated by a 2 hour fire barrier in lieu of the code required 2 hour fire wall. The proponent advises that the new 2 story addition will be protected by an automatic sprinkler system per the 2010 Edition of NFPA 13 and additional close spaced sprinklers will be provided along the 2 hour fire barrier separating the existing jail and the new addition. The hard ship is the cost and difficulty of constructing a structurally independent 2 hour fire wall between the new addition and the existing building.
- BI (b) The door to be installed within the 2 hour fire barrier will have non-rated security glazing in the door, which is not allowed by code. The code requires fire rated glazing to be installed in this door assembly. Additional closed spaced sprinklers will be provided on each side of the door designed to wash the non rated glazing. The hardship is the fact that there is no glazing product available that will meet both security glazing and the fire rating requirements.
- BI (c) Non-rated security glazing will be installed within the smoke barrier wall where the smoke barrier is along the central control room and code requires fire rated glazing at this location. Additional close spaced sprinklers will be provided along each side of the security glazing. The hardship is the fact that there is no glazing product available that

will meet both the security glazing, and fire rating requirements. If fire rated glazing was added parallel alongside of the security glazing this would add a significant cost hardship and potentially compromise the view through the glazing. Providing only fire rated glazing would reduce the safety and cause security concerns.

Mirro Family Research and Education Center at Parkview Regional Medical 14-03-43 BICenter -- Part of the Parkview Health System - Fort Wayne

The code required Type II-A construction type will not be completely followed. The structure will be approximately 48,950 sq. ft. on the first floor and 6,250 sq. ft. on the second floor and will have an upper roof structure 20 feet or more above the floor below allowing a non-rated roof. The remaining structure will be non-rated and protected by an upgraded sprinkler system with a minimum Ordinary Hazard Group 1 density and spacing. The code requires the exposed steel structure and columns to be protected by one hour fire proofing. The proponent advises that the building will be protected by an automatic sprinkler system per NFPA 13, the 2010 Edition. The sprinkler system will be designed at an increased rating of Ordinary Hazard Group 1 density and spacing (from light hazard) over the area where the steel structure is exposed. There will be additional sprinklers provided, designed to wash the non-rated columns and limit the temperature exposure from a fire. The hardship is the cost and difficulty of providing and maintaining fire proofing on the exposed steel structure and the owner's desire to have the look of an open exposed steel structure.

14-03-44 C/NVRI **Grant County Amvets Post 5 – Marion**

The code required sprinkler system will not be installed in the existing building, that is being changed from a bowling alley into a assembly area for the Amvets organization. The proponent advises that the existing bowling alley will be renovated to remove the bowling alleys and a new floor installed to make usable square footage which will increase the occupant load, which will require the building to be sprinklered. The proponent advises that they will undertake the following alternatives in lieu of compliance with the code: A fire alarm will be installed in accordance with Section 907 of the Indiana Building Code, smoke detection will be provided throughout the building and tied into the fire alarm system, which is not required by the code, a shunt trip will be installed so that the activation will shut down any music, which is not required by the code, there are currently 5 exits to the exterior, the clear exit width provided is 250" which accommodates an occupant load of 1,250, the maximum travel distance to an exit is 162 feet and the code permits 200 feet, due to the open space in the structure a fire in the space would be quickly identifiable. The hardship is the cost to provide a sprinkler system. What is the cost?

14-03-45 CI Green Sense Farms - Portage

Project #364630 The new combination S-1/S-2/B occupancy will have a tenant moving into an existing warehouse facility that will have grow rooms of approximately 8,698 sq. ft. and the office of 1,396 sq. ft. and the grow rooms and office areas will not be provided with the code required sprinkler system. The proponent advises that the S-2 grow rooms consist of steel racks with, plants that are set in plastic trays full of water. The proponent advises they will undertake the alternative actions in lieu of compliance with the code. The building will be protected with an ESFR sprinkler system except for the areas listed,

grow rooms and offices. The grow rooms are a low hazard use and could be considered an S-2 occupancy, which does not require a sprinkler system. The office ceiling tiles will be designed with Ceilume ceiling tiles that are designed to shrink and fall out of the ceiling grid so that the RTI (Response Time Index) of the sprinkler system is not delayed. The effect is such that the office does not have a ceiling and does not obstruct the sprinkler discharge. The hardship involves the cost of approximately \$30,000.00 to install sprinklers in these areas. What sprinkler system is above the ceiling tiles?

14-03-46 CI Zaxby's at Fishers Marketplace – Fishers

Project #367506

The code required sprinkler system will not be provided in the restaurant (A-2 Occupancy) which has a calculated occupant load in excess of 100. The fire alarm system installed in accordance with Section 907 of the IBC will be installed throughout the building, which is not required by the code. The maximum travel distance from the dining room to an exit is 54 feet and the code allows 200 feet. This restaurant is one where the person orders their meal and goes to their seat and they place a number on the table and the food is brought to them, rather than standing in line waiting for their food to come up and then they go to their seat. The owner of several of these restaurants advises that the most patrons they have ever had in any of the restaurants is 85; there are 73 seats provided and at rush hour they have 8 to 9 employees working. The restaurant also has a drive through which reduces the number of patrons who may be standing and waiting for their order. The hardship is the cost to provide a sprinkler system. What is the calculated occupant load? What is the cost to comply?

14-03-47 CI Toyota Motor Engineering and Manufacturing of North America – Princeton – Fire Alarm System Replacement

The variance request is to reduce the Construction Design Release application processing fee from \$0.0030 to \$0.0010 per square foot and to limit the construction inspection fee from a maximum of \$7,500.00 to \$2,500.00. The proponent advises that the current fee schedule does not have a cost related processing fee for specific types of work such as fire system upgrades, electrical upgrades, and medical gas piping upgrades. The scope of the fire alarm upgrade project is not more than 1/3 of the scope of typical remodel projects, where the scope of a remodel project would involve much more effort for plan review and inspection. The hardship is the cost of the processing fees which are based on remodel scopes of work at \$0.0030 per square foot and construction inspection fees that are based on new construction of buildings at \$0.10 per square foot with a \$7,500.00 limit. How big is the building? What is the cost per sq. ft. of their proposed payment?

14-03-48 CI Zurcher Tire – Monroe

Project #368376

The code required smoke and heat vents and curtain boards will not provided and the project will have mechanical exhaust without draft curtains instead. The structure is an existing S-1 occupancy, tire storage building of 11,942 sq. ft. of Type IIB construction which will have an addition of 20,892 sq. ft. and will be a S-1 occupancy of Type IIB construction as well. The proponent advises that the existing building and addition will be protected with an automatic fire suppression system per NFPA 13, 2010 Edition. The mechanical exhaust will be designed with one cfm/sq. ft. for the existing and new

buildings. The hardship involves the design of the smoke removal system does not include the use of curtain boards that are primarily for smoke vent operations. Is the mechanical exhaust a manual system or automatic?

14-03-49 CI **Darlington Community Center – Darlington**

The existing structure, which prior use was as a federal armory, now has been deeded back to the city as a community center and it has been determined by plan review that this is a change of occupancy due to the change of governmental ownership. The proponent advises that the building has had a deed change but the uses will remain the same. If at any time a change of occupancy is proposed a Chapter 34 analyst will be prepared. The renovations will comply with the current rules of the Commission. The hardship is the cost and feasibility to conduct a Chapter 34 evaluation for a building that is not changing uses only ownerships. Under what rules of the Commission was the building built?

14-03-50(a)(b) Steuben County Community Corrections – Angola

Project #368903

- (a) The variance request is to permit the existing masonry walls and concrete floor as the required separation from the remainder of the building in lieu of the code required fire walls. The project is the change from an administrative area in a correctional facility to an R-1 occupancy correctional work release, rehab and bunk rooms. The occupants will not be secured and are free to come and go as they please. The proponent advises that the change of occupancy portion of the building will be protected with a sprinkler system per NFPA 13R, 2010 Edition. The change of occupancy is separated from the historic 2 story building to the north with masonry walls that are 8" + thick and separated from the 2nd story above with precast concrete of 8". The hardship is that a portion of the building is on the National Register of Historic places and is not permitted to be modified. The 2nd floor on the south building is not currently occupied except for some misc. storage.
- CI (b) The variance request is to allow the masonry wall separating this building from the south building as a fire wall for purposes of separating the buildings into two 2 story buildings. The proponent advises that the newer building is precast walls, roof and floors. Plan review has determined that the building is a 3 story building and the historic portion of the building is VB construction. The building has exterior masonry wall and could meet Type IIIB construction, but it is unknown if there is any wood within the interior framing of the exterior walls. The change of occupancy portion of the building will be protected with a fire suppression system per NFPA 13R, 2010 Edition. The hardship is the impossibility of creating a true fire wall at this location and the prohibitive cost of an upgrade to the historic building to VA construction or IIIB construction.

14-03-51 B **733 Loft Apartments – Indianapolis**

Project #367535

The code required ¾ hour rated openings protective for openings when greater than 5' and less than 10' from centerline of the public way (alley) will not be provided. The proponent advises that the existing buildings are a 3 story and a 4 story R-2 occupancy apartment building that each has windows on the east side that exceed the permitted 10% unprotected openings based on the location on the property. The building is protected with an NFPA 13R sprinkler system throughout per the 1999 Edition. There are

sprinklers provided at each window that exceeds the permitted 10% unprotected openings. The hardship involves the cost to replace the existing windows.

\mathbf{C} Southside Diner Expansion - Lafayette 14-03-52

The variance request is to permit the 2 hour walls separating the space to be the boundary for the Chapter 34 evaluation, in lieu of the entire strip center. The existing A-2 of 1,800 sq. ft. is being expanded into a former "B" occupancy, which was a nail salon of 900 sq. ft. The proponent advises that the space will be separated from the remainder of the building with a 2 hour fire resistive construction from floor to roof deck. The hardship is the technical issue of Section 3410.2.2, which was deleted in the amendments. Is the 2 hour construction a single wall and is it sealed at the roof deck?

Legado Development - New Professional Building - Lafayette 14-03-53 \mathbf{C}

The new development consists of 2 buildings (new office/lab of 11,970 sq. ft. and retail space of 6,000 sq. ft.) and will not have access roads that are within 150 feet of all portions of the buildings, as required by code. There will be no future uses such as A, E. I or H occupancies as permitted. The breezeway walls are constructed with one hour fire resistive elements. The hardship involves the extremely tight site to add additional access roads.

14-03-54 \mathbf{C} Don Marcos - Remodel - Lawrence

Project #366427 The variance request is to allow the use of 2 hour walls separating this space to be the boundary of the Chapter 34 evaluation rather that the entire structure as required by code. The existing tenant space of 1,406 sq. ft. is undergoing a change of occupancy to A-2 occupancy with an occupant load calculated at 98. Plan Review has determined the occupant load to be 140. A Chapter 34 review has been completed and had passing scores. The proponent advises that the space is separated from the remainder of the building with 2 hour 8" masonry and brick walls from floor to roof deck. The Chapter 34 evaluation includes smoke detection throughout the space. The hardship involves the cost to provide sprinklers with a calculated load less than 100.

Trinity Metals – Indianapolis 14-03-55 D

The 2 private hydrants on the property are not functional and are not accessible which is in violation of the code. The proponent advises that the existing S-1 occupancy, metal recycling facility has the 2 hydrants, the south hydrant is on an access road/parking, but is not operational based upon several breaks in the line and hydrant. The west hydrant is not accessible from an access road. The building has two city hydrants in front of the building that are operational off of the main road. The proponent advises that the building is protected with an automatic fire suppression system. The building is a recycling center and the majority is noncombustible. The hardship involves the cost to repair the system, estimated \$30,000 +). In addition the private hydrants are not readily accessible from the parking lot to the south or from English Avenue tot eh west hydrant. Why have the hydrants not been maintained and/or kept in a code compliant spacing from the items being stored around them?

14-03-56 C Penguin Random House – Expansion – Crawfordsville

The code maximum egress travel distance that is permitted is 400 feet, or 525 feet for the warehouse facility, will be 600 feet. Per the proponent, the addition will be protected with an ESFR sprinkler system per NFPA 13, 2010 Edition, and the existing building sprinkler system is designed to the 1999 Edition of NFPA 13. The roof height of the building is 40 feet. The overall height will provide ample time for occupants to egress the building before the unlikely event the smoke layer would extend lower than 7 feet above the finished floor and make egress untenable. The ESFR sprinkler systems are designed to extinguish a fire not control the fire like standard sprinklers. The hardship involves the cost, operational difficulties and feasibility to provide horizontal exits and/or exit passageways in a warehouse facility.